

What is claimed is:

1. An apparatus for dispensing super absorbent particles, comprising:

a funnel having a first end and a second end, the second end being narrower in diameter than the first end; a nozzle having a straight section, a curved section, and a tip, wherein the straight section of the nozzle is operatively associated with the second end of the funnel; and

a diverter plate operatively associated with the curved section of the nozzle.

2. The apparatus of claim 1, wherein the diverter plate is bent at an angle of up to about seventy (70) degrees, as measured from that section of a hypothetical plane extending lengthwise beyond the tip of the nozzle, if the diverter plate were straight, and the angled diverter plate.
3. The apparatus of claim 2, wherein the tip of the nozzle is substantially in contact with the diverter plate.
4. The apparatus of claim 1, wherein the funnel and nozzle are of unitary construction.
5. The apparatus of claim 1, wherein the curved section of the nozzle tapers to form the tip.
6. The apparatus of claim 5, wherein the curve in the curved section of the nozzle is disposed between the straight section

of the nozzle and the point in the nozzle wherein the nozzle begins to uniformly decrease in size to form the tip.

7. A method for making an absorbent core, comprising:
 - fiberizing pulp;
 - entraining the fiberized pulp in a stream of gas;
 - introducing the entrained fiberized pulp into the first end of a forming chamber;
 - introducing super absorbent particles into the forming chamber; and
 - depositing the entrained fiberized pulp and super absorbent particles on a forming surface located at a second end of the forming chamber to form an absorbent core, wherein the super absorbent particles are introduced into the forming chamber with the apparatus of claim 1.
8. An absorbent core made in accordance with the method of claim 7, whereby the absorbent core comprises at least fiberized fluff and superabsorbent particles.
9. The absorbent core of claim 8, wherein the super absorbent particles are polymer particles comprising polyacrylic salts or mixtures containing polyacrylic salts and other super absorbent particles.
10. The absorbent core of claim 8, wherein the fiberized fluff comprises one or more components selected from the group consisting of wood fibers, chemical wood pulp, fibrous absorbent gelling material, fluffed bleached kraft softwood

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pulp, fibrous absorbent gelling material, and mixtures thereof.

11. An absorbent article, comprising:
 - a top sheet material;
 - a back sheet material; and

the absorbent core of claim 8.
12. A system for making an absorbent core, comprising:
 - a supply of a plurality of fiber sheets;
 - transport means to transport at least some of the fiber sheets to a fiberizer;
 - a fiberizer to form fiberized pulp from the fiber sheets;
 - a gas stream to entrain the fiberized pulp;
 - a forming chamber with a first end, a midsection, and a second end, wherein the gas stream with the entrained fiberized pulp enters the first end of the forming chamber;
 - a forming surface located at the second end of the forming chamber, the forming surface comprising a first surface facing the forming chamber, and a second surface facing away from the first surface;
 - a means for creating a pressure differential between the first surface and the second surface of the forming surface, wherein the pressure on the first surface is higher than the pressure on the second surface; and

an apparatus for introducing super absorbent polymer particles into the midsection of the forming chamber, the apparatus comprising

a funnel having a first end and a second end, the second end being narrower in diameter than the first end;

a nozzle having a straight section, a curved section, and a tip, wherein the straight section of the nozzle is operatively associated with the second end of the funnel; and

a diverter plate operatively associated with the curved section of the nozzle.

13. The system of claim 12, wherein the forming chamber further comprises an upper surface and a lower surface, such that the forming surface is housed within the upper surface and the lower surface of the forming chamber.
14. The system of claim 12, wherein the diverter plate extends beyond the tip of the nozzle, and the distance between the point where the diverter plate extends beyond the tip of the nozzle and the forming surface is from about 150 mm to about 205 mm
15. The system of claim 13, wherein the tip of the nozzle is from about 140 mm to about 160 mm below the upper surface of the forming chamber.

16. A method for making an absorbent garment, comprising:
 - fiberizing pulp;
 - entraining the fiberized pulp in a gas stream;
 - introducing the gas stream with entrained fiberized pulp into a first end of a forming chamber;
 - introducing super absorbent particles into the forming chamber with the apparatus of claim 1 to mix the super absorbent particles with the gas stream with the entrained fiberized pulp;
 - depositing the entrained fiberized pulp and super absorbent particles on a forming surface to form a pad of fluff,
 - preparing an absorbent core from the pad of fluff;
 - preparing a top sheet material;
 - preparing a back sheet material; and
 - disposing the absorbent core between the top sheet material and the back sheet material.
17. An absorbent garment comprising a top sheet, a back sheet, and the absorbent core of claim 8, the absorbent core being disposed between the top sheet and the back sheet.
18. An absorbent garment made in accordance with the method of claim 16.
19. The absorbent garment as claimed in claim 17, wherein the garment has a third insult ~~Strikethrough~~ of less than about 55 seconds, and a third insult ~~Rewet~~ of less than about 20 grams.

20. The absorbent garment as claimed in claim 19, wherein the third insult Rewet is less than about 15 grams.

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